18. The system of claim **17**, wherein a second motion sensor of the one or more motion sensors is a gyroscope, the motion data includes angular rate data output by the gyroscope and extracting the one or more features further comprises:

determining a second frequency spectrum of angular rate data measured about an axis aligned with the user's wrist; and

determining a second base frequency within a second specified frequency range of the second frequency spectrum, wherein the second specified frequency range is associated with the dyskinesia or tremor frequency range.

19. The system of claim **18**, further comprises:

determining, by the one or more processors, a likelihood of non-dyskinesia by comparing power at the second base frequency to power at one or more other frequencies in the second frequency spectrum, and determining the likelihood of non-dyskinesia based at least in part on results of the comparing.

20. The system of claim **18**, where extracting the one or more features further comprises:

determining, by the one or more processors, a spectral entropy of the motion data; and

determining, by the one or more processors, a likelihood of dyskinesia or chorea based at least in part on a likelihood mapping of the spectral entropy to a probability distribution of dyskinesia data.

21. The system of claim **20**, wherein the motion data is acceleration data from an accelerometer and determining the spectral entropy further comprises:

determining a frequency spectrum of the acceleration data;

determining a base frequency within a specified frequency range of the frequency spectrum, wherein the specified frequency range is associated with dyskinesia or chorea;

reassigning energy from harmonics of the base frequency to the base frequency; and

determining the spectral entropy at the base frequency.

22. The system of claim **12**, wherein determining the likelihood of dyskinesia or tremor further comprises:

determining, based on a machine learning process, the likelihood of dyskinesia or tremor using training data indicative of at least one of the user's activity level, one or more symptom characteristics or one or more contextual clues.

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